Title: Testing and Tracing Paper

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Date: 10th November 2020

Action required:
☐ For noting
☑ For discussion
☐ For decision

Approved for future publication: YES
Testing and Tracing Paper for NPHET, 10th of December

Updates are provided below regarding the following aspects of Testing and Contact Tracing:

1) Activity levels across sampling, laboratory testing and contact tracing,
2) Turnaround Times,
3) Support services for delayed tests,
4) Testing Programmes,
5) Process improvements,
6) Service Model: Testing and Tracing,
7) Update on key challenges and issues.

1. Activity levels across sampling, laboratory and contact tracing

Sampling in the community and in acute settings.
Over the seven-day period, 1st - 7th December, there has been approximately 78,489 swabs taken for COVID-19 testing. A total of 34,793 swabs were taken in the community, the majority were performed at fixed testing sites and a portion as home visits. Approximately 24,798 swabs were taken in acute settings. The remainder 18,898 swabs were taken as part of the Serial Testing programmes of staff in Residential Care Facilities and staff in Food Production Facilities.

Please note; data from 29th November – 5th of December show that the 0-10 age group makes up 21.5% of all referrals, the age group with the largest percentage of referrals. The detected rate for the 0-10 age group is 3.4%. The 11-20 age group, which made up the second largest percentage of all referrals, 15.9% of all referrals, have a significantly higher detected rate of 5.6%.

Laboratory Testing
Over the seven-day period, 1st – 7th of December, there have been 76,365 lab tests completed. A total of 47,598 of these tests were processed in community laboratories and 28,767 tests were processed in acute laboratories.

Contact Tracing
From 1st – 7th of December, a total of 8,579 calls were made in the Contact Tracing Centres. A total of 2,051 of these were Call 1s which involves the communication of a detected result. The remaining 6,528 calls that were completed related to contact tracing.

Over the past seven days, the average number of close contacts per case was 3.5.
Contact tracing is carried out in Galway (HSE), Limerick (HSE and Revenue), Cork (HSE), Dublin (Sandyford), Dublin (UCD), Parkgate street/Merion Lane and Kells (HSE).

Additional activities which are ongoing in contact tracing include active surveillance calls daily or every second day. In addition to the daily active surveillance texts we have been sending since May. Furthermore, we are piloting Source Identification (Retrospective Tracing). We aim to implement this fully by mid-December.
2. Turnaround Times
   (1\textsuperscript{st}– 7\textsuperscript{th} of December)

   **End-to-end turnaround time**

   We continue to keep sharp focus on end-to-end turnaround times, highlighting any opportunity for improvement, while recognising that some cases are increasingly complex in nature.

   Over the seven-day period, 1\textsuperscript{st}– 7\textsuperscript{th} of December;
   - The median end-to-end turnaround time, from referral to SMS, for not detected tests in the community setting was 1.7 days.
   - The median turnaround time for time, from referral to communication of a detected result by SMS, in community settings was 1.8 days.
   - The median end-to-end turnaround time, from referral to the end of contact tracing, for detected cases in the community setting was 2.1 days.

   **Overall Swab to laboratory result communicated – Medians**
   - 26 hours in Acute.
   - 29 hours in Serial Testing.
   - 28 hours in Community.

   **Referral to appointment**

   In the community, the median time from referral to appointment was 0.2 days.

   91\% of GP referrals are provided with a COVID-19 test appointment within 24 hours.

   **Swab to lab result**

   For swabs processed in a community lab, the median time for swab to lab result was 26 hours.
   For swabs processed in an acute lab, the median time for swab to lab result was 25 hours.
   The combined median time from swab to lab result was 25 hours.

   **Contact Tracing:**

   The median time to complete all calls, from the 1\textsuperscript{st}– 7\textsuperscript{th} of December was 0.8 days, the average is 1.1 days.
3. Support services for delayed tests - Delayed Test Result Search Service for GPs, members of the public and HSE staff/healthcare workers.

**HSELive**
If a member of the public has been waiting longer than two days for a test result, they can contact HSELive on 1850 24 1850. The HSELive team will take all the required details and will send this information to the Delayed Test Result Search Service. The Search Service will get back to the caller directly and aims to complete searches within 24 hours of the @HSELive call.

- In the last seven days (Nov 30th – Dec 6th), 570 queries have been received.
- This has decreased from last week where 603 queries were received. (6%↓ decrease).
- This has decreased in comparison to the last thirty days, where 564 weekly queries were received on average. (1%↑ increase).
- A total of 93% of queries received in the last seven days were fully resolved within the 24-hour target.

**GPs**
In collaboration with the ICGP, there is now an established email service for GPs whereby GPs can submit their query using a password protected form in respect of a delayed test result. Results are communicated to both the GP and patient.

- In the last seven days (Nov 30th – Dec 6th), 12 queries have been received.
- This has increased from last week where 10 queries were received. (20%↑ increase).
- This has decreased in comparison to the last thirty days, where 14 queries were received weekly on average. (14.29 %↓ decrease).
- A total of 83% of queries received in the last seven days were fully resolved within the 24-hour target.

**Healthcare Workers & HSE Occupational Health**
Staff can enquire about their delayed test result via the Healthcare Worker Covid-19 Helpline on 1850 420 420. Queries are directed to the Delayed Test Result Search Service. Occupational Health can also direct queries to the Search Service via the GP email address using a password protected form. Results are communicated to both occupational health physician and healthcare worker.

- In the last seven days (Nov 30th – Dec 6th), 131 queries have been received.
- This has increased from last week where 123 queries were received. (6.5%↑ increase).
- This has also increased in comparison to the last thirty days, where 98 weekly queries were received on average. (33%↑ increase).
- A total of 99% of queries received in the last seven days were fully resolved within the 24-hour target.
4. Testing Programmes

Serial Testing in Residential Care Facilities
Serial testing in nursing homes commenced on the 23rd of June. To date, the programme has completed 347,328 tests and identified 1,055 detected cases. This is a detected rate of 0.30%.

Cycle 5 of serial testing in residential care facilities commenced on the 11th of November for a four-week period. As of the 8th of December, Cycle 5 of serial testing has completed 62,764 tests and identified 205 detected cases. This represents a detected rate of 0.33%. Currently results are being provided to Nursing Homes within 48 hours where these results were previously communicated after 72 hours.

At present, work is underway to include mental health facilities and disability services that provide 24-hour care to their residents, as part of this serial testing programme. Direction on the inclusion rationale of these facilities is being guided by Public Health. A schedule of testing over the Christmas period has been developed and communicated with all parties involved in the serial testing of residential care facilities.

Serial Testing in Food Production facilities
Serial testing in food production facilities commenced on the 21st of August. To date, the programme has completed 67,903 tests and identified 356 detected cases. This is a detected rate of 0.52%.

Cycle 3 of the food production serial testing programme concluded on the 4th of December. Cycle 3 of has completed 18,819 tests and identified 129 detected cases. This represents a detected rate of 0.69%. Cycle 4 of the food production serial testing programme commenced on the 7th of December. To date, cycle 4 has carried out 1,053 tests and there have been no detected results.

The HSE is working closely with internal and external stakeholders to identify and implement improvements which can be built into the serial testing programme and has increased the level of communications with food production facilities.

A number of facilities have hired additional staff, to meet the increased seasonal demand throughout the months of November and December. The increase in staff numbers has been factored into the cycles and has resulted in additional facilities being included in the serial testing programme. A schedule of testing over the Christmas period has been developed and communicated with all parties involved in the serial testing of food production facilities.

Schools Testing Programme
COVID-19 testing is ongoing in school settings and childcare facilities. As of December 8th, 1,159 facilities (primary school, post primary school, special education and childcare facilities) have had/are having some testing completed based on a Public Health Risk Assessment. A total of 32,120 tests been carried out as part of this mass testing. From the 1,159 schools that had mass tests, an additional 839 detected cases have been identified over and above original cases. This is a detected rate of 2.6%.
5. Process Improvements
We continue to work to improve turnaround times, consistency and our end-to-end testing pathway in general. This section presents the latest set of enhancements.

Data quality improvements
Several major improvement initiatives have been identified to improve the test and trace process. When complete, these will deliver faster results to the public, accelerate issue resolution and enhance overall operational management and effectiveness. Immediate priority improvement initiatives include investigation to ensure facilities that are part of serial testing are receiving an overview of their results as quickly as possible. By ensuring accurate data is submitted when the test is being scheduled, this will generate faster and more accurate reports.

Further investigation is also underway into ‘unknown’ test results which are being received from acute labs. Active follow up and solutions are being put in place to deal with these scenarios. A new process improvement has recently been implemented in order to facilitate a swifter resolution of unknown results. A further process adjustment has been identified to ensure timely resolution across unknowns that have previously been raised.

Additional initiatives are being considered in relation to acute labs in order to identify opportunities for greater efficiency following the initial point of data capture. Specific pathways are being explored that relate to inpatients and the prevention of additional communication being provided, following provision of test results by a physician. At first, these pathways will be explored in relation to one acute hospital before considering how these improvements can be rolled out to acute hospitals on a wider basis.
6. Service model: Test and Trace

The implementation of the service model for Test and Trace is continuing. This includes recruitment to enable the staffing of the service model for community swabbing, labs and contact tracing and estate development in terms of a permanent and sustainable testing centre and contact centre footprint. The overall contact tracing requirement is to have a total of 800 WTEs. As of the December 8th there are 684 individuals have been onboarded who are a part of the dedicated workforce. A further 60 contact tracers are expected to be onboarded by the week ending 13th of December. The swabber recruitment target is 900 WTEs. A total of 603 additional people has been placed to date to carry out swabbing activities. Any requirement for further resources to support the test and trace system will then be reviewed.

Engagement between the Minister, the Department of Health and the HSE has continued in respect of testing volumes and associated costs. With respect to testing volumes, the HSE is working toward daily capacity in the region of 25,000 tests. Several programmes of work are in place to implement this and to ensure a stable, quality assured service is developed at this scale. The next step is to finalise and agree the associated costs for the service with the Department of Health. The estimated costs have been shared with the Department for their review and input.

Additionally, detailed operational and surge planning is underway across the service pathway to account for demand and capacity requirements over the December and January period. Engagement in respect of this activity will be ongoing across the pathway and key stakeholder groups to ensure a coordinated and integrated response.
7. **Update on any key challenges/issues**

1. The volume of mass testing in school and childcare facilities is an additional and considerable strain on Public Health Departments, who take the lead when assessing risks in a school setting in the case or a confirmed case or a confirmed or suspected outbreak. To mitigate this, there is an enhanced testing pathway for schools in operation. The overall aim of this testing pathway is to ensure that testing at schools follows a single consistent process, that tests can be grouped (such that results come back in a batch and can be clearly linked to the specific school for follow-up) and that increased administrative support is made available to public health. The HSE have implemented a Public Health school support team and created additional support videos for school principals and parents alike.

2. Over the past week, we have seen a slight increase in demand for community testing. It is likely that as we exit level 5 of restrictions and enter level 3, these reduced restrictions will have an impact on the demand on the test and trace system. In order to ensure that our services can continue to meet demand now, a recruitment drive is underway and is an example of actions we are taking in response to critically assessing the demand on the test and trace system.

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3. The HSE continues to review the demand for testing across the country, opening additional pop up centres, where necessary to meet demand. As of the 8th of December, there are 36 testing centres in operation, 33 static test centres and 3 pop up test centres. These three pop up test centres open in Carlow Town, the Cleary Centre in Donegal Town and Charlestown in Finglas. Provision of greater clarity and guidance to members of the public on how to safely travel to a Test Centre is available on HSE.ie and additional guidance has been issued to GPs.